--The two diol monomers, which are always to be reacted separately, are: a first diol monomer of relatively high molecular weight and a second diol monomer of low molecular weight. The second diol monomer preferably has terminal hydroxyl groups, and has a molecular weight of about 62 to 122. ~~The first diol monomer preferably has terminal hydroxyl groups, and has a number average molecular weight of about 1,000 to about 8,000.~~ In a preferred embodiment, the first diol monomer is a member selected from the group consisting of a polyether diol, a polyester diol and a mixed polyether-polyester diol.

Please amend paragraph [0020] on pages 7-8 as follows:

--After the separate reactions of the two diol monomers are conducted, the two products are worked up and purified, if desired. When these two products are combined under reaction conditions in a reaction extruder along with suitable catalyst, a final polyurethane polymer product is obtained. The polyurethane polymer has a ~~number average~~ molecular weight of about 100,000 and above, and preferably about 200,000 and above. The tenacity of the polymer is about 0.6 grams/denier and above. The elongation of the polyurethane polymer is about 400% and above. All of the above properties are present in fibers prepared from said polyurethane polymer.

Please amend paragraph [0029] on page 10 as follows:

--In reference to the process step of adding a first organic diisocyanate to the polyol prepolymer, the mole ratio of isocyanate groups to hydroxyl groups in the mixture is preferably about ~~2:1~~ 1:2 to about 1:1.1. The mixture is then preferably heated at a temperature of about 60°C to about 100°C and at atmospheric pressure for a time of about 20 minutes to about 100 minutes.

Please amend paragraph [0033] on page 12 as follows:

--The ~~polylol~~ polyol prepolymer ~~preferably has a number average molecular weight of about 1000 and above, most preferably about 2000 to 6000. Such a prepolymer~~ can be a chain extended polyester made from a glycol, preferably a mixture of ethylene and butylene glycols, and a saturated organic dicarboxylic acid, preferably adipic acid. The acid usually contains 4 to 20 carbon atoms. Typical examples include succinic acid, maleic acid, dihydromalonic acid, thiodipropionic acid, adipic acid, methyl adipic acid, glutaric acid, dimerized linoleic acid, sebacic acid, suberic acid, phthalic acid, and terephthalic acid. To some extent hydroxycarboxylic acids or their lactones can be used, eg., caprolactone, to aid in forming the polyesters. As stated, mixtures of various dibasic acids and glycols can be used to form mixed esters.

Please amend paragraph [0035] on page 13 as follows:

--As an alternative to the polyesters there may be used for reaction with the diisocyanate one or more elastomer yielding polyethers. Such polyethers are typically anhydrous chain extended polyethers possessing ether linkage separated by hydrocarbon chains either alkyl or aryl in nature. The ether should also contain terminal groups reactive with isocyanate, such as alcoholic hydroxyl groups. Such polyethers should be linear with a second order transition point of not over 25°C, preferably not over 10°C. ~~The number average molecular weight range is from 500—7000, but preferably is within the range of 1000 to 5000. Preferred polyethers have the formula H(OR)nOH where R is a lower alkylene group (2 to 6 carbon atoms) and n is an integer so that the molecular weight falls within the range specified.~~ Examples of polyethers are polyethylene glycol, polypropylene glycol, polybutylene glycol, mixed polyethylene glycolpolypropylene glycol, polytetramethylene glycol. ~~(e.g., of 1000 number average molecular weight).~~

Please amend paragraph [0043] on page 17 as follows:

--The ratio of the reactants, the temperature of the reaction, and the time of the reaction are all critical factors in determining the length of the first "soft" segment, which ultimately regulates the elongation and recovery properties of the fiber. The length of the first "soft" segment can be in multiples of the starting

polyol. ~~; so that if the starting polylol has a number average molecular weight of about 2000, then the length of the "soft" segment, when prepared under proper conditions, can contain some segments from 10,000 to even about 40,000 molecular weight.~~